

What Is Claimed Is:

1. A liquid crystal display device, comprising:
  - a plurality of liquid crystal cells on a substrate;
  - a plurality of drive lines extending along first and second directions and connected to the plurality of liquid crystal cells;
  - a plurality of pad lines extending from each of the plurality of drive lines at a first angle from one of the first and second directions; and
  - a plurality of pads extending at the first angle and connected to each of the plurality of pad lines for supplying external drive signals.
2. The device according to claim 1, wherein the plurality of drive lines includes gate lines and data lines.
3. The device according to claim 1, wherein the plurality of pads extending at the first angle correspond to a location of the liquid crystal cells to be connected.
4. The device according to claim 3, further includes a tape carrier package having a signal pad extending at the first angle and electrically contacting the plurality of pads.

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5. The device according to claim 4, further includes a driving circuit mounted on the tape carrier package for supplying the external drive signals.

6. A method of fabricating a liquid crystal display device having a matrix array of liquid crystal cells, comprising the steps of:

forming a drive line to extend along a first direction on a substrate;

forming a pad line to extend from the drive line at a first angle from the first direction;

forming a pad to extend at the first angle and connected to the pad line;

forming an insulating film material on the substrate to cover the pad line and the pad;

forming a contact hole in the insulating film to expose the pad; and

forming an electrode pattern on the insulating film to connect to the pad through the contact hole.

7. The method according to claim 6, wherein the plurality of drive lines includes gate lines and data lines.

8. The method according to claim 6, wherein the plurality of pads extending at the first angle are disposed along an edge of the substrate.

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9. The method according to claim 8, further includes a tape carrier package having a signal pad extending at the first angle and electrically contacting the plurality of pads.
10. The method according to claim 9, further includes a driving circuit mounted on the tape carrier package for supplying external drive signals.
11. A liquid crystal display device, comprising:
- a substrate;
  - a plurality of orthogonal drive lines on the substrate;
  - a plurality of pads extending at a first acute angle from an edge of the substrate; and
  - a plurality of pad lines extending at the first angle and interconnected between each of the plurality of orthogonal drive lines and pads.
12. The device according to claim 11, wherein the plurality of drive lines includes gate lines and data lines.
13. The device according to claim 11, wherein the plurality of pads extending at the first angle are disposed at the edge of the substrate.

14. The device according to claim 13, further includes a tape carrier package having a signal pad extending at the first angle and electrically contacting the plurality of pads .

15. The device according to claim 14, further includes a driving circuit mounted on the tape carrier package for supplying external drive signals to the plurality of drive lines.

16. A method of fabricating a liquid crystal display device, comprising the steps of:

forming a plurality of drive lines to extend along first and second directions on a substrate;

forming a plurality of pad lines to extend from the plurality of drive lines at a first acute angle from an edge of the substrate;

forming a plurality of pads to extend at the first acute angle and connect to the plurality of pad lines;

forming an insulating film material on the substrate to cover the plurality of pad lines and the plurality of pads;

forming a plurality of contact holes in the insulating film to expose the plurality of pads; and

forming an electrode patterns on the insulating film to connect to the plurality of pads through the plurality of contact holes.

17. The method according to claim 16, wherein the plurality of drive lines includes gate lines and data lines.

18. The method according to claim 17, further includes a tape carrier package having a signal pad extending at the first acute angle and electrically contacting the plurality of pads.

19. The method according to claim 18, further includes a driving circuit mounted on the tape carrier package for supplying external drive signals.

20. The method according to claim 18, wherein the signal pad directly overlaps the plurality of pads.

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